

WHAT IS CLAIMED IS:

1. A method of handoff in a CDMA communication system, comprising:  
executing a handoff of a call connection of a first information call of a mobile station from a first base station to a second base station;  
comparing a packet zone identifier of a second information call transmitted from the second base station with a packet zone identifier maintained by the mobile station; and  
transmitting a call initializing message of the second information call from the mobile station to the second base station to request a handoff of the second information call if the packet zone identifiers are different.
2. The method of claim 1, wherein the second information call is dormant.
3. The method of claim 1, wherein the second information is packet data.
4. The method of claim 1, wherein an information transmission connection with the second base station is initialized after the mobile station completes an information transmission connection with the first base station in said handoff execution step from the first base station to the second base station.

5. The method of claim 1, wherein the packet zone identifier is transmitted from the second base station to the mobile station via a message in the information transmitted from the second base station.

6. The method of claim 5, wherein the message in the transmitted information is an in-traffic system parameter.

7. A method of performing a handoff in a communication system, comprising:  
performing a handoff of a first call of a subscriber unit from a first fixed station to a second fixed station;

receiving an In-traffic System Parameter Message having a packet zone identifier from the second fixed station over an air interface;

comparing the packet zone identifier of the second fixed station transmitted in the In-traffic System Parameter Message with a packet zone identifier of the first fixed station stored in the subscriber unit to perform a handoff of a concurrent second call, wherein the first call is an active call and the second call is a dormant packet data call.

8. The method of claim 7, further comprising transmitting an acknowledge order from the subscriber unit to the second fixed station to acknowledge receipt of the In-traffic System Parameter Message.

9. The method of claim 8, further comprising transmitting a Handoff Complete message from the second fixed station to a switching center associated with the first and second fixed stations to indicate that the handoff is complete.

10. The method of claim 7, wherein an information transmission connection with the second fixed station is initialized after the subscriber unit releases an information transmission connection with the first fixed station after the handoff of the concurrent second call from the first fixed station to the second fixed station.

11. The method of claim 7, wherein the first call is one of a packet service call and a circuit service call.

12. The method of claim 7, wherein the handoff of the second information call is completed using a Packet Control Function.

13. The method of claim 7, wherein the second information call uses a Point-to-Point Protocol (PPP) to communicate with a Packet Data Serving Node.

14. The method of claim 7, wherein performing a handoff of a first call comprises:

transmitting a handoff required message from the first fixed station to a switching center to determine if a handoff is necessary;

transmitting a Handoff Request message from the switching center to the second fixed station to request a handoff to the second fixed station if a handoff is necessary;

transmitting Null Forward Traffic frames from the second fixed station to the subscriber unit to assist in acquiring the subscriber unit by the second fixed station;

transmitting a Handoff Request Acknowledge message from the second fixed station to the switching center to acknowledge receipt of the Handoff Request message;

transmitting a Handoff Command message from the switching center to the first fixed station to initiate the handoff;

transmitting a Handoff Direction message from the first fixed station to the subscriber unit to inform the subscriber unit of the handoff;

transmitting an Acknowledge Order message from the subscriber unit to the first fixed station to acknowledge receipt of the Handoff Direction message;

transmitting a Handoff Commenced message from the first fixed station to the mobile switch to indicate that the handoff has commenced;

transmitting at least one of Reverse Traffic Channel Frames and a Preamble from the subscriber unit to the second fixed station;

transmitting a Handoff Completion message from the subscriber unit to the second fixed station to indicate that the handoff has been completed; and

transmitting an Acknowledge Order message from the second fixed station to the subscriber unit to acknowledge receipt of the Handoff Completion message.

15. The method of claim 14, further comprising:

transmitting an Acknowledge Order message from the subscriber unit to the second fixed station after receiving the In-traffic System Parameter Message to acknowledge receipt of the In-traffic System Parameter Message;

transmitting a Handoff Complete message from the second fixed station to the switching center to indicate that the handoff is complete;

transmitting a Clear Command message from the mobile switch to the first fixed station to inform the first fixed station that the subscriber unit may be cleared from the first fixed station; and

transmitting a Clear Complete message from the first fixed station to the switching center to indicate that the subscriber unit has been cleared from the first fixed station.

16. The method of claim 7, wherein communication system is a CDMA communication system.

17. The method of claim 7, further comprising transmitting a call initializing message of the second packet data call from the subscriber unit to the second fixed station to request a dormant handoff of the second information call if the packet zone identifiers of the first and second fixed stations are different.

18. A method of performing a handoff in a mobile communication system, comprising:

performing a handoff of an active fist call from a first fixed station to a second fixed station;

receiving a packet zone identifier from the second fixed station;

transmitting a packet data call initialize message to the second fixed station if the packet zone identifier of the second fixed station is different than the packet zone identifier of the first fixed station; and

completing a dormant handoff using a Packet Control Function if a second call is concurrently maintained on a single logical channel with the first call and the second call is a dormant packet data call.

19. The method of claim 18, wherein the packet zone identifier is received from the second fixed station in an In-Traffic System Parameter message.

20. The method of claim 18, wherein a single subscriber unit maintains at least two calls on a single logical connection between a call controller and a switching center when the handoff is performed, and wherein one of the calls is a dormant packet data call.

21. The method of claim 20, wherein the packet zone identifier of the first fixed station is stored in the subscriber unit to compare it to the packet zone identifier of the second fixed station.

22. A method of performing a dormant handoff, comprising:  
performing a handoff of an active call from a first fixed station to a second fixed station;  
receiving an In-traffic System parameter message from the second fixed station; and  
performing a dormant handoff of a dormant packet call that is concurrently maintained with the active call based on information in the In-traffic System parameter message.

23. The method of claim 22, wherein the In-traffic System parameter message includes a packet zone identifier of the second fixed station.

24. A user equipment for a communication system, comprising:

- means for maintaining two concurrent calls on a single logical connection;
- means for performing a handoff of an active one of the two concurrent calls from a first fixed station to a second fixed station;
- means for storing a packet zone identifier of the first fixed station;
- means for receiving an In-traffic System Parameter Message having a packet zone identifier from the second fixed station over an air interface;
- means for comparing the packet zone identifier of the second fixed station to the packet zone identifier of the first fixed station; and
- means for performing a dormant handoff of a dormant one of the two concurrent calls, wherein the dormant call is a dormant packet data call.

25. The user equipment of claim 24, further comprising means for transmitting an acknowledge order to the second fixed station to acknowledge receipt of the In-traffic System Parameter Message.